Dear FCC,

I wish to comment, briefly, upon what is considered
to be appropriate AM communications practice for
good intelligibility.

I am sure there is a happy medium in all this, but it
is not necessarily below an enforced +/-3KHz and
certainly nowhere as low as +/-2.8KHz.

In light of the knowledge quoted below, which represents the
highest state of the art in classical AM comunications
practice, I ask that the FCC not impose statutory
limits on the bandwidth of AM signals. The gentlemans'
agreements and the voluntary limitations of AM modulating
audio frequnecies to about 3KHz are enough. No statutotry
limits are called for, nor are they desirable.

I respectfully quote from these long recognized sources of
learned wisdom in the matter of AM communications systems:

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"Understandable speech requires the reproduction of all
frequencies from about 250 to 2700 cycles, or sideband
frequencies ranging from 250 to 2700 cycles above and
below the carrier frequency."

FROM: "RADIO ENGINEERING", second edition, 1937, chapter 9,
section 72, page 396, "Waves with Amplitude Modulation",
Frederick Emmons Terman, Sc.D., Professor of Electrical
Engineering, Stanford University.

--Commenters' Note: Mr. Terman's text says 'requires',
therefore this is taken as the minimum requirement for
speech to be 'understandable'. This does not necessarily
imply good communications quality, but merely
'understandability'.

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"Modulation frequencies Corresponding to Typical Signals
(minimum frequency range that must be met)"

"Long-distance telephone quality.....250-3500 c/s."

FROM: "RADIO ENGINEERING", third edition, 1947, chapter 9,
section 9-1, page 469, table 9-1 --Modulation frequencies
Corresponding to Typical Signals (minimum frequency range
that must be met)., Frederick Emmons Terman, Sc.D., Professor
of Electrical Engineering and Dean of theSchool of Engineering,
Stanford University. Past president, Institute of Radio Engineers.

--Commenter's note: Please consider the audio quality of long
distance telephone service in 1947.

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"...For ordinary SSB telephony, M=3000 Hz. .."
"...For high quality SSB Telephony, M=4000Hz. ..."
"...For ordinary DSB telephony, M=6000 Hz. ..."
"...For high quality DSB Telephony, M=8000Hz. ..."

FROM: "THE RADIO MANUAL", fourth edition, 1950, appendix 5, page 859, "Table of necessary bandwidths", George E. Sterling, Commissioner, Federal Communications Commission, and Robert B. Monroe, Radio Engineer, Columbia Broadcasting System, D. Van Nostrand Company, Inc. 4th edition, 1950.

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"Frequencies up to at least 2,500 cycles, and preferrably 3500 cycles, are necessary for good speech intelligibility."

FROM: "RADIO HANDBOOK", fourteenth edition, 1956, chapter 12, section 12-1, page 225, Editors and Engineers, Ltd., edited by William I. Orr, W6SAI.

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"...Mediocre reproduction may be restricted to 100-5000 c/s., while many radio receivers are limited to 100-3500c/s. It should be remembered that the frequency range is taken as overall, including the loss of sidebands and including the loudspeaker. Wide frequency range is only comfortable to the listener so long as other forms of distortion are negligible."

FROM: "THE RADIOTRON DESIGNER'S HANDBOOK, THIRD EDITION", 1941, chapter 5, page 32, "frequency distortion", THE RADIOTRON DESIGNER'S HANDBOOK, THIRD EDITION", F. Langford Smith, S.SC., Member I.R.E, M. I.R.E., A.M.I.E.E., A.M.I.E

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respectfully,
Patrick Jankowiak
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Amateur: KD5OEI